JAVA.UTIL.RANDOM CLASS

Introduction

The **java.util.Random** class instance is used to generate a stream of pseudorandom numbers.Following are the important points about Random:

- The class uses a 48-bit seed, which is modified using a linear congruential formula.

- The algorithms implemented by class Random use a protected utility method that on each invocation can supply up to 32 pseudorandomly generated bits.

Class declaration

Following is the declaration for **java.util.Random** class:

```
public class Random
   extends Object
      implements Serializable
```

Class constructors

S.N.	Constructor & Description
1	**Random()** This creates a new random number generator.
2	**Random(long seed)** This creates a new random number generator using a single long seed.

Class methods

S.N.	Method & Description
1	protected int next(int bits) This method generates the next pseudorandom number.
2	boolean nextBoolean() This method returns the next pseudorandom, uniformly distributed boolean value from this random number generator's sequence.
3	void nextBytes(byte[] bytes) This method generates random bytes and places them into a user-supplied byte array.
4	double nextDouble() This method returns the next pseudorandom, uniformly distributed double value between 0.0 and 1.0 from this random number generator's sequence.
5	float nextFloat()

	This method returns the next pseudorandom, uniformly distributed float value between 0.0 and 1.0 from this random number generator's sequence.
6	double nextGaussian() This method returns the next pseudorandom, Gaussian ("normally") distributed double value with mean 0.0 and standard deviation 1.0 from this random number generator's sequence.
7	int nextInt() This method returns the next pseudorandom, uniformly distributed int value from this random number generator's sequence.
8	int nextInt(int n) This method returns a pseudorandom, uniformly distributed int value between 0 (inclusive) and the specified value (exclusive), drawn from this random number generator's sequence.
9	long nextLong() This method returns the next pseudorandom, uniformly distributed long value from this random number generator's sequence.
10	void setSeed(long seed) This method sets the seed of this random number generator using a single long seed.

Methods inherited

This class inherits methods from the following classes:

- java.util.Object